Customer No.: 31561
Docket No.: 13137-US-PA
Application No.: 10/710,844

AMENDMENTS

To the Claims:

Claim 1. (Currently amended) A low-temperature polysilicon thin film transistor (LTPS-TFT), adapted to be disposed on a substrate, the LTPS-TFT comprising:

a gate disposed on the substrate;

a gate dielectric layer disposed on the substrate and the gate;

a patterned silicon layer disposed on the gate dielectric layer and over the gate, wherein the patterned silicon layer comprises a polysilicon channel region and an amorphous silicon hot carrier restrain region adjacent thereto;

a patterned insulating layer disposed on the patterned silicon layer;

an ohmic contact layer disposed on a portion of the patterned silicon layer other than the polysilicon channel region and the amorphous silicon hot carrier restrain region as well as ~~and~~ a portion of the insulating layer over the amorphous silicon hot carrier restrain region to expose a portion of the patterned insulating layer; and

a source/drain layer disposed on the ohmic contact layer.

Claim 2.(original) The LTPS-TFT of claim 1, further comprising a passivation layer disposed on the source/drain layer to cover the patterned insulating layer.

Claim 3.(original) The LTPS-TFT of claim 1, wherein the ohmic contact layer

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comprises an n-type ohmic contact layer or a p-type ohmic contact layer.

Claim 4.(original) The LTPS-TFT of claim 1, wherein the material of the insulating layer comprises silicon oxide or silicon nitride.

Claims 5-19 (cancelled)

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